Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

February 7, 2002

CERTIFIED RETURN RECEIPT
7000 3400 0016 8896 4103

W. Dan Proctor, Project Manager
Unico, Incorporated
951 East 830 South
Pleasant Grove, Utah 84062

Re: Second Review of Notice of Intention to Commence Large Mining Operations, Unico Mines, Deer Trail Mine, M/031/003, Piute County, Utah

Dear Mr. Proctor:

The Division has completed a review of your December 17, 2001 response to the Division's Review of your draft Notice of Intention to Commence Large Mining Operations for the Deer Trail Mine, located in Piute County, Utah, which was received December 18, 2001. After reviewing the information, the Division has the following comments that need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. Comments in *italicized* print describe how you responded to the previous review comment. Comments in ***bold italic still need to be addressed.*** Please provide a response to this review March 8, 2002.

The Division will suspend further review of the mine NOI until your response to this letter is received. If you have any questions in this regard please contact me, Lynn Kunzler, Tom Munson or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment: Review
cc: Steve Winslow, USFS w/attachment
m31-03-Jan 2002-rev-ltr.doc

SECOND REVIEW OF NOTICE OF INTENTION
TO COMMENCE LARGE MINING OPERATIONS

Unico Mines
Deer Trail Mine

M/031/003
February 7, 2002

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

Please describe the dimensions and construction of all buildings that will be located at the millsite, including any proposed for construction. (DJ)

Please describe the construction (wood, metal, etc) of the buildings on site. Also include concrete description, reinforced, unreinforced, and thickness. (DJ)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Please provide cross sections of all processing ponds, fresh water ponds, etc. (TM)

The drawings supplied adequately address the comment. Operator's response satisfies the regulatory requirement for this section of the rule. (TM)

R647-4-106 - Operation Plan

106.2 Type of operations conducted, mining method, processing etc.

Will there be quality assurance on the HMS to assure that the waste rock to be sold as a crushed rock product will not contain sufficient amounts of mineralization to cause off-site contamination? (DJ)
Please provide a list of the equipment contained in and used with the HMS. (DJ)

The HMS system has been removed from the plan of operations. Operator's response satisfies the regulatory requirement for this section of the rule. (DJ)

106.3 Estimated acreages disturbed, reclaimed, annually.

The fresh water pond acreage was not noted in the areas. Was it included under other features? When noting estimated acreages for tailings pond, please include areas affected by these items as a part of the total acreage. (DJ)

The revised plan states that the fresh water pond will be replaced with a holding tank.
Please Note: The 1/4 acre disturbance associated with the fresh water pond will continue to be considered a part of the total disturbance at the site until the feature has been reclaimed and released by the Division.

Please show the location of the holding tanks on the surface facilities map. Also state the size of the holding tank and site for bonding purposes. (DJ)
The soil stockpiles occupy approximately 0.5 acres. Is this included in the total acreage? (DJ)

The revised plan states that the soil stockpile areas are included in the total acreage. This satisfies this section of the plan. (DJ)

Have the disturbances for the water line from Alunite Springs and the buried power lines to the proposed load out area been included in the total disturbed acreages? (DJ)

The applicant states that the disturbances associated with the electrical and water line will not take place at this time. This satisfies this section of the plan. (DJ)

106.5 Existing soil types, location, amount

The NOI indicates that approximately 10 inches of soil over a 10-acre area is available for salvage. Please note, this will provide approximately 13,400 cubic yards of soil, not the 5,000 yards identified. Please correct this figure. (LK)

The soil volume estimates have been corrected. Operator's response satisfies the regulatory requirement for this section of the rule. (LK)

Please provide a laboratory analysis of the soil materials that will be used for reclamation. This analysis needs to include: pH, texture, % organic matter, electrical conductivity (EC), cation exchange capacity (CEC), sodium absorption ratio (SAR), total nitrogen, available phosphorus (as P_2O_5), and potassium (as K_2O). (LK)

The requested soil analysis was not submitted. This analysis is needed to determine the need for, or adequacy of soil amendments, fertilizer, etc. for reclamation. (LK)

106.6 Plan for protecting & redepositing soils

The soil stockpile located near the HMS seems to become a part of the HMS operation when it is constructed. Will this stockpile be relocated before the start of the HMS operation? If so please note the new location. The location of the soil stockpile directly below the planned tailings pond is unacceptable. If the dam should fail the pile would become contaminated and Unico would be unable to use this material for reclamation. (DJ)

The Division acknowledges that the HMS system will not be installed at this time.

The revised plan did not acknowledge the Division's concern with the location of the topsoil pile directly below the tailings pond. Please move the proposed soil storage area and show the new location on the surface facilities map. (DJ)

106.8 Depth to groundwater, extent of overburden, geology

The operator plans on drilling wells to supply drinking water for the site. Please provide more information on what geologic formations are known to exist in the area that would supply drinking water. (TM)

The operator's response is that the operation does not plan on drilling any water wells and the only known ground water is 800 feet below the site. Operator's response satisfies the regulatory requirement for this section of the rule. (TM)

106.9 Location & size of ore, waste, tailings, ponds

The plan indicates that the size of the tailings ponds to be located at the site are 110' x 75' and 300' x 180' and the size of the fresh water holding pond will be 80' x 80'. Please provide more design details for these structures describing: 1) how they will be built and to what specifications, 2) where the spillways will be located, and 3) in case of failure, where the tailings will go. (TM)

The response supplied plan views and cross sections of the ponds and a explanation of the closed water recycling system. The operator's response satisfies the regulatory requirement for this section of the rule. (TM)

Using the scaled Milling Facilities map, the areas indicated appear to be the storage area of each feature. The total area disturbed by each feature should be used when noting disturbed acreage. (DJ)

This comment was not addressed in the revised plan, please respond. (DJ)

R647-4-107 - Operation Practices

107.2 Drainages to minimize damage

Please describe any drainage crossings by roads within the property and how the drainage will be protected. (TM)

All crossings will be adequately protected. Operator's response satisfies the regulatory requirement for this section of the rule.(TM)

107.3 Erosion control & sediment control

Is all storm water runoff from the disturbed areas routed to impoundments to prevent excess sediment from leaving the site? Please provide a better description on a plate, showing the direction of storm water runoff. (TM)

Operator's response satisfies the regulatory requirement for this section of the rule.(TM)

107.4 Deleterious material safety stored or removed

Secondary containment for deleterious material should be 110% of capacity. (DJ)

Secondary containment is at least 100% of capacity. The operator's response satisfies the regulatory requirement for this section of the rule. (DJ)

107.6 Suitable soils removed & stored

Due to the limited availability of topsoil, use of topsoil material to level areas is not recommended. (DJ)

Please acknowledge that topsoil will not be used to level areas. (DJ)

107.6 Concurrent reclamation

Due to the metal and chemical contamination of the tailings, an overburden cap may be required before soil is placed on these areas. Please provide documentation from Dept. of Environmental Quality (Div. Of Water Quality) as to the type of cap that they will require for closure of this facility. (DJ)

A copy of the Division of Water Quality's construction permit was included in the revised plan. This satisfies this section of the plan. (DJ)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems

There is mention of an NPDES discharge point related to the fresh water pond and discharge from a storm event. Please provide a copy of that permit in the plan. The plan describes monitoring of the springs down stream from the tailings impoundment but does not provide locations of where these springs are located and it does not describe what water quality parameters will be monitored. Please provide this information. (TM)

The Plan also describes monitoring waters upstream from the site but does not provide locations of sampling points or the actual water quality parameters to be sampled and at what frequency. Please provide this information. (TM)

The ponds and tailing impoundments are listed as non-discharging facilities. In case of a major storm event or emergency overflow, where will the discharge go and what are the potential impacts? (TM)

The monitoring of any impoundment is subject to the requirements of the construction permit issued by the Div. Of Water Quality. The response indicates that there is no monitoring other than what is stated in that permit. ***Please provide a copy of the construction permit to the Division for our review. (TM)***

109.4 Slope stability, erosion control, air quality, safety

Air quality permits will need to be obtained from the Utah Division of Air Quality. (DJ)

The operator's response indicated that an Air Quality Permit was not required for this operation. ***Please provide a copy of the letter from the Division of Air Quality stating that an air quality permit will not be required for this operation. (DJ)***

R647-4-110 - Reclamation Plan

110.1 Concurrent & post mining land use

The Division cannot approve leaving structures (i.e. buildings) for the post mining land use until at the time of closure. At that time, if there is a viable alternative use (other than mining related) for these buildings, the Division can waive reclamation requirements. Please plan on total reclamation of the site for this operation. (LK)

While the operator acknowledged that the Division cannot approve buildings for a proposed post-mining land use until mining is completed, no plans for reclamation were provided. ***Please provide plans for complete reclamation of all mining related facilities. (LK)***

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Please indicate the overflow location for the fresh water pond on the Deer Trail Mine and Mill Operation map. (DJ)

The revised plan states that, when the fresh water pond is replaced with a holding tank, post-mining overflow from the pond will not be a problem. ***Please indicate how the overflow (if any) from the holding tank will be handled. (DJ)***

Will any road crossings be reconstructed upon reclamation? If so, please provide the necessary plans. (TM)

Road crossing will not need to be reconstructed upon reclamation. Operator's response satisfies the requirement for this section of the rule. (TM)

110.3 Description of facilities to be left (post mining use)

Please refer to comments under R647-4-110.1. The Division cannot consider an alterative use for the buildings until at the time of reclamation. At that time, you will need to provide documentation for the alternative use and that the buildings are suitable for the intended alternative use. (LK)

The operator has acknowledged that DOGM cannot approve an alternative land use for the buildings until at the time of reclamation. This response is satisfactory. (LK)

110.4 Description or treatment/disposition of deleterious or acid forming material.

Please describe Unico's plans should the waste dump begin to generate acid drainage. Reactivity of materials being placed on the waste dump in the future cannot be predicted and materials being placed on the dump will contain metal sulphides (potential acid formers). (DJ)

The revised plan states that any acid produced in the waste dumps will be controlled by the excess neutralizing capacity of these features. Operator's response satisfies the regulatory requirement for this section of the rule. (DJ)

110.5 Revegetation planting program

Scarification of replaced soils by tracking over the surface is not an acceptable method of soil preparation. Plowing the surface with the track hoe bucket is acceptable and is expected to leave a rough surface. (LK)

The plan indicates that the oversize material from the dump screening at the Upper Deer Trail Mine is to be placed in a terraced central dump, terraced, mulched and seeded. Soils should be harvested from the areas below this central dump and placed over the dump material to assure revegetation success of this effort. (DJ)

Soils will be harvested before screened material dumps are constructed. This soil will be used to cover the dumps upon reclamation. The reply contained in the response is sufficient to satisfy the requirement of the rule. (DJ)

R647-4-111 - Reclamation Practices

111.8 All roads & pads reclaimed

Waste dumps will require grading to a 3h:1v slope, topsoil replacement, contour ripping and seeding upon closure. (DJ)

The revised notice acknowledges the need to perform the above-mentioned activities. The response satisfies the requirements of this rule. (DJ)

111.9 Dams & impoundments left self draining & stable

A variance under Rule R647-4-111 will need to be applied for to allow the fresh water pond to remain after the closure of the facility. (See comments under R647-4-112). (DJ)

The fresh water pond will now be reclaimed. This comment is no longer pertinent to this review. (DJ)

111.11 Structures & equipment buried or removed

Please see comments under R647-4-110.3. (LK)

*The response states that 'in the event the Division of Oil, Gas and Mining does approve of the post mine use of the buildings, they will be torn down and buried'. The Division will assume that the buildings will be torn down if the Division does **not** approve the post mine use of these structures upon completion of mining activities.* ***Please Clarify. If this assumption is correct, it will also satisfy the comments under R647-4-110.1. (LK)***

R647-4-112 - Variance

The operator will need to request a variance from Rules R647-4-111 (Reclamation Practices) to allow the fresh water pond to remain after reclamation by submitting the following information:

1.11. The rule which the variance is requested from: (R647-4-111.9 – Dams and Impoundments to be self-draining and stable.)
1.12 A description of the specific variance requested and a description of the area affected by the variance request; show this area on the reclamation treatments map.
1.13 Justification for the variance

The fresh water pond will be reclaimed. This comment is not longer pertinent. (DJ)

No variances are presently requested by the operator. (LK)

R647-4-113 - Surety

The Division acknowledges that the U.S. Forest service presently holds a $24,000 bond on the Deer Trail Mine and the Division holds a $19,000 transitional surety on the millsite. Because these two sites have been consolidated, a single surety under both the Division of Oil, Gas, and Mining and the U.S. Forest Service should be considered. This will be resolved at the time the final surety amount is calculated. (DJ)

The operator needs to provide a bond calculation for this site with his response to this review. A generic bond estimation sheet is attached to assist the operator in calculating the required surety amount. (DJ)

jb
Attachments: Bond estimation sheet
M31-03-2nd-rev.doc

RECLAMATION SURETY ESTIM (o:/data/bonding/min vb2)

Operator Name last revision 02/02/00

Mine Name *filename M000-000 WB2* page "estimate D10"

DOGM file number *County*

Prepared by Utah State Division of Oil, Gas & Mining

-This estimate uses a D10 size dozer for most earthwork

Print block named "d10est" for the estimate page & "d10notes" for the notes page

Note: actual unit costs may vary according to site conditions ***last unit cost update*** 2-Aug-2000

-Amount of disturbed area which will receive reclamation treatments = 0.0 **acres**

-Estimated total disturbed area for this mine = 0.0 **acres**

Activity	Quantity	Units	$/unit	$	Note
Safety gates, signs, etc. (mtls & installation)	0	sum	*200*	0	(1)
Demolition of buildings & facilities	0	CF	*0 24*	0	*(2)*
Debris & equipment removal - trucking	0	trips	*50*	0	*(3)*
Debris & equipment removal - dump fees	0	CY	*55*	0	*(4)*
Debris & equipment removal - loading trucks w/FE loader	0	hours	*166*	0	*(5)*
Demolition & debris removal - general labor	0	hours	*15*	0	*(6)*
Regrading facilities areas	0.0	acre	334	0	(7)
Regrading waste dump slopes	0	CY	0 34	0	(8)
Ripping waste dump tops	0 0	acre	317	0	(9)
Ripping stockpile & compacted areas	0 0	acre	317	0	(9)
Ripping pit floors	0.0	acre	317	0	(9)
Ripping pit access roads	0.0	acre	317	0	(9)
Creating safety berms or barriers around highwalls	0	LF	0 11	0	(10)
Ripping access roads - dozer	0.0	acre	317	0	(9)
Regrading access roads - dozer	0 0	acre	434	0	(7)
Sidecast mtl replacement on steep roads- trackhoe	0	LF	*1.09*	0	*(11)*
Surface drainage restoration or construction	0	LF	0 11	0	(10)
Topsoil replacement - dozer	0	CY	0 34	0	(12)
Topsoil replacement - scraper	0	CY	*1 15*	0	*(13)*
Topsoil replacement - truck & FE loader	0	CY	*2 60*	0	*(14)*
Mulching (2 ton/acre alfalfa)	0.0	acre	*160*	0	*(00)*
Fertilizing (100 lb/acre diammonium phosphate)	0.0	acre	*90*	0	*(00)*
Composted manure (10 ton/acre)	0.0	acre	*300*	0	*(00)*
Broadcast seeding (~20 lb/acre)	0.0	acre	*225*	0	*(00)*
Drill seeding (~13 lb/acre)	0 0	acre	*205*	0	*(00)*
Hydroseeding	0 0	acre	*800*	0	*(00)*
General site cleanup & trash removal	0.0	acre	*50*	0	*(00)*
Equipment mobilization	0	equip	*1000*	0	*(00)*
Reclamation Supervision	0	days	*386*	0	*(15)*
		Subtotal		0	
10% Contingency				0	
		Subtotal		$0	
Escalate for 5 years at 3.12% per yr				0	
		Total		$0	
		Rounded surety amount in yr 2006-$		**$0**	
Average cost per disturbed acre =		ERR			